

PROPERTY PLANNING COMMON ELEMENTS

COMPONENTS OF MASTER PLANS

HABITATS AND THEIR MANAGEMENT

Migratory Bird Stopover Habitat

The great majority of Wisconsin's birds do not spend the whole year here but migrate to other states or other countries during the non-breeding season. Thus, they are regularly moving between summer breeding grounds and non-breeding wintering areas, which can be anywhere from hundreds to thousands of miles apart. Most birds complete their migrations in stages, stopping to feed and rest at various points along their migratory path. These sites are known as stopover sites. Stopover sites can generally be thought of as places that provide birds with resources they need to continue on their migratory journey – food, water, shelter, and protection from predators. Stopover sites vary widely in size, quality, and the degree to which they furnish these needed resources.

Migration is a very energetically demanding and risky time in a bird's lifecycle. Migration itself is physically very taxing, and birds must also navigate many dangers during their migratory journeys, including unfamiliar terrain, bad weather, predators, loss or degradation of stopover habitats, and various anthropogenic hazards (e.g., collisions with tall buildings or other structures, reflective glass, transmission lines, etc.). Mortality during migration can be quite high; for some species, such as wood-warblers, mortality rates during migration can be higher than at any other point in their lifecycle. The recognition over the past two decades that migration is a time of elevated vulnerability for many birds has led to increased conservation attention on stopover sites and on the need to provide a network of sites along migratory flyways that birds can use.

High quality stopover sites are large, intact natural areas with a diversity of habitats (both upland and wetland) that consistently provide abundant resources to large numbers of birds. However, even small, resource-poor sites not often thought of as having conservation value can be critical to acutely stressed migrants seeking shelter from predators or storms. Research throughout the Great Lakes region has highlighted the importance of stopover sites along the shorelines of the Great Lakes. These coastal sites may be disproportionately important to a successful migration for many species because they represent the first available landfall for birds negotiating large ecological barriers (i.e., the lakes). Sites within five miles of the shorelines of Lakes Michigan and Superior are especially valuable for many birds (the closer to the shoreline, the more valuable). Other important sites are forested river and stream corridors or shorelines of inland lakes, particularly those with a north-south orientation, and large wetland complexes. In heavily altered landscapes (e.g., urban or agricultural areas), even small green spaces like city parks or fragmented woodlots can be valuable.

Management Objective

- Manage habitats on DNR lands to provide benefits to migrating birds.

Management Prescriptions

- Maintain and enhance the quality, extent, and connectivity of native habitats, particularly on properties within five miles of the shores of Lakes Michigan and Superior.



- Manage forests to maintain or increase species and structural diversity by encouraging a variety of appropriate native species (including masting and fruiting species), providing a range of size and age classes, and retaining structural features like snags and coarse woody debris.
- Transitional areas between different habitat types (e.g., between forests and grasslands or wetlands) provide opportunities to enhance habitat, as migrating birds often concentrate at these edges. Manage these areas as gradual or “soft” transitions between habitats by retaining or planting native small trees, shrubs, and herbaceous plants. Favor appropriate masting, fruiting, nectaring, and seed-bearing species (e.g., oaks; hickories; hackberry; cherries; hemlock; white spruce; eastern red cedar; willows; dogwoods; serviceberry; nannyberry; viburnums; elderberry; wild grape; wild columbine; beebalm; coneflowers; asters; goldenrods, etc.).
- Maintain forested corridors along streams and rivers.
- Where appropriate and feasible, manage flowages and impoundments with drawdowns to provide mudflat habitat for migrating shorebirds.
- Manage open wetlands to maintain a mix of emergent native vegetation and open water to benefit migrating waterfowl and waterbirds.
- Use native species when landscaping around public use or administrative areas such as visitor centers, campgrounds, and office buildings. Favor high-value tree species including oaks, hickories, willows, and elms, fruiting shrubs and vines, and nectaring and seed-bearing herbaceous plants.
- Control non-native invasive plants.

